ABSTRACT

The purpose of this study was to develop a vision for U.S. Cooperative Extension. A Delphi panel of nationally recognized Cooperative Extension experts was developed to collect data. The 12 panelists reached consensus on a vision of Cooperative Extension. Key components of the vision statement include: cutting edge technology; power of the land-grant university; and values of collaboration, effectiveness, excellence, healthy (economies, environment, people), inclusiveness, leadership, research, partnerships, and support for employees. Cooperative Extension should examine ways to align its efforts with the vision identified from this study in order to pro-actively plan for a successful future.

INTRODUCTION

Cooperative Extension in the United States has faced some of the same issues for years – issues such as budget (Acker, 2001; Bequette, 2002; McDowell, 2004), image (Boldt, 1988; Jenkins, 1993; King, 1993), and employee turnover (Clark, 1992; Ensle, 2005; Ezell, 2003; Strong & Harder, 2009). These issues threaten the continuity and quality of extension programming (Harder, Lamm, & Strong, 2009). Famed futurist Edward Cornish (2004) wrote: “The goal of futuring is not to predict the future but to improve it” (p. 66). It was with this philosophy in mind that we, the researchers, sought to build a vision of Cooperative Extension for 2015. Gerber (1993) stated:

Creating a new vision for the organization is the beginning of the change process. An institutional vision that is widely shared will give the system a clear sense of purpose. It will allow individuals to find their own place in the organization, thus providing a sense of personal security. This will result in an environment in which constant change in response to a changing world becomes possible. (Vision and Systems Thinking, p. 8)
Braun (1995) stated Cooperative Extension needed to “heal itself” (p. 4). The development of a forward-thinking vision may inspire the change needed for healing the Cooperative Extension system.

**PURPOSE & METHODS**

The purpose of this study was to develop a vision of U.S. Cooperative Extension for the year 2015. Cornish (2004) listed the use of a Delphi panel as an acceptable method for futuring. According to Linstone and Turoff (2002), “Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem” (p. 3). Opportunities for individuals to anonymously provide input, receive aggregated feedback from the group, and revise their views are characteristic of the group communication process (Linstone & Turoff).

There is little agreement regarding the ideal number of panelists for a Delphi study (Powell, 2003). According to Ludwig and Starr (2005), “the validity of a Delphi study depends not on the number of participants polled, but rather on the expertise of the panel who participate” (p. 316). Previous research (Powell, 2003; Rowe & Wright, 1999) found the accuracy of a Delphi panel was increased when the panel consisted of experts.

Two methods were used to ensure the panelists for this study had the appropriate expertise in Cooperative Extension. First, the state directors of Cooperative Extension in all 50 states were solicited by mail and asked to nominate two extension experts internal to their states and two external extension experts. Extension experts were identified as “county or state faculty; agents/educators, specialists, or directors; [who] may specialize in any program area. An extension expert should be well-regarded within his/her own state and/or program area, and have a working understanding of extension issues at the national level” ([researcher], personal communication, January 14, 2008). A self-addressed, stamped envelope was included to encourage the state directors to respond.

Thirty-three state directors responded, resulting in 117 nominations. Duplicate nominations were tracked to identify the individuals who were commonly regarded as extension experts. There were ten potential panelists identified through this method. Seven of the potential panelists were state directors, two were specialists, and one was an associate dean. Three of the potential panelists were female and seven were male. The primary program expertise of the potential panelists included 4-H youth development, agricultural economics, agriculture, natural resources, family and consumer sciences, family economics, animal science, and program development.
Goldstein (in Linstone & Turoff, 2002) recommended the inclusion of a panelist from each field when multiple fields of expertise are represented in a study. Peer-elected officers from each of the agent/educator associations (NAE4-HA, NACAA, NACDEP, NEAFCS, and ANREP) were invited to serve as panelists to further ensure equitable representation of all programmatic areas. The invitation to the association representatives also served to create adequate representation for the county educators, as no county educators met the criteria for selection as a panelist based on the first recruitment method. This was a concern, as panel experts should have credibility with the target audience (Powell, 2003). Inviting peer-elected members from each agent association addressed the concern and resulted in the addition of three female and two male potential panelists. Each had program expertise reflective of the organizations they represented.

The final list of potential panelists contained the names of 15 individuals. These individuals were mailed a personalized invitation explaining the purpose of the study and requesting the participation of the recipient. Directions for opting out of the study were provided. An informed consent form and a return envelope were included. The mailed invitation resulted in ten acceptance letters. The remaining five participants were contacted by the researchers via the telephone. The second contact resulted in the participation of two additional panelists.

The classic Delphi study has four phases which serve to take the broad quantity of data provided by panelists in the early rounds and gradually pare it down to a concise summary in the final round (Linstone & Turoff, 2002). It had four rounds that were conducted using SurveyMonkey. Descriptions of each round are provided in Table 1.

Table 1: Delphi Round Descriptions

<table>
<thead>
<tr>
<th>Round</th>
<th>Panelists asked to:</th>
<th>Unit of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>Provide their vision of Cooperative Extension in 2015</td>
<td>Open-ended responses</td>
</tr>
<tr>
<td>Round 2</td>
<td>Rate vision stem statements from Round 1</td>
<td>Six-point rating scale⁹</td>
</tr>
<tr>
<td>Round 3</td>
<td>Reach consensus on the vision stem statements from Round 2</td>
<td>Six-point rating scale⁹</td>
</tr>
<tr>
<td>Round 4</td>
<td>Rate the final definitions for the vision of Cooperative Extension in 2015 developed from Round 3 stem statements Rank-order the “agree” and “strongly agree” definitions</td>
<td>Six-point rating scale⁹</td>
</tr>
</tbody>
</table>

Note. ⁹Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree.
In Round 1, panelists were asked to develop their vision of Cooperative Extension in 2015. The researchers wanted to balance ease of task for the participants with the usefulness of the results. The selection of the year 2015 meant the vision was developed on a seven year time frame, which increased the complexity of the task as compared to a five year time frame but ensured there would still be the majority of the time frame remaining if the results of this study were published.

Based on the definition provided by McLean (2006), panelists were instructed that a good vision statement specifies what the organization will do or be, who it will do it for, and what values will be used to meet the vision. This step was designed to orient the panelists' thinking toward the future, thereby minimizing the threat of backward thinking identified by Athey and Orth (1999).

The qualitative data generated from Round 1 was used to generate vision stem statements categorized according to the three criteria of a good vision statement. Panelists indicated their level of agreement with the vision stem statements in Round 2 using a six-point rating scale. The level of consensus a stem statement needed to achieve was determined a priori. At least two-thirds of the respondents had to rate an item as “agree” or “strongly agree” in order for it to progress to the next round. This standard is consistent with past research in agricultural and extension education (Martin, Fritzsche, & Ball, 2006; Shinn, Briers, & Baker, 2008; Shinn, Wigenbach, Briers, Lindner, & Baker, 2009). Panelists were asked to confirm their agreement with the remaining vision stem statements in Round 3. During the confirmation round, the means for each item from the preceding rounds were presented to the panelists. The same a priori definition for consensus was applied for the final vision stem statements.

The vision stem statements remaining after Round 3 were organized by the researchers into definitions for Cooperative Extension in 2015. Five such definitions were offered to the panel for consideration in Round 4. Panelists were then instructed to rank-order the definitions for which they agreed or strongly agreed. The ranks were used to determine the consensus definition.

The data were collected between June and August 2008. Three reminders were e-mailed to increase the response rate in the first three rounds. Four reminders were e-mailed during Round 4. Rounds 1, 2, and 4 had a 100% response rate, while Round 3 had a 75% response rate.

**FINDINGS**

Four rounds were conducted with a Delphi panel to develop a vision of Cooperative Extension for the year 2015. The findings have been
presented, by round, in the subsections that follow. Complete quantitative findings have not been reported due to page limit restrictions, but are available from the researchers upon request.

Twelve vision statements were submitted by the panelists in Round 1. The vision statements were broken down into stem statements. Duplicate stem statements were consolidated. After consolidation, 24 statements addressed what Cooperative Extension will do or be in 2015, 11 statements addressed who Extension will serve, and 29 identified values. The number of vision stem statements was reduced in Round 2. There were 21 “what” statements, 9 “who” statements, and 26 values that reached the level of agreement necessary to move to Round 3. Panelists wrote-in two additional audiences. Stem statements dropped from Round 2 were: (a) create healthy environments, (b) fills voids rather than duplicates efforts, (c) models of delivery will be consistent, (d) industry, (e) NGOs, (f) international recognition, (g) nimble, and (h) service (see Table 2).

Table 2: Percentage Response and Frequencies of Eliminated Round 2 Stem Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>Category</th>
<th>Response Options</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create healthy environments.</td>
<td>What</td>
<td>0.0% (0)</td>
<td></td>
<td></td>
<td>33.3% (4)</td>
<td>33.3% (4)</td>
<td>16.7% (2)</td>
<td>16.7% (2)</td>
</tr>
<tr>
<td>Fill voids rather than duplicate efforts.</td>
<td>What</td>
<td>0.0% (0)</td>
<td></td>
<td></td>
<td>8.3% (1)</td>
<td>50.0% (6)</td>
<td>33.3% (4)</td>
<td>8.3% (1)</td>
</tr>
<tr>
<td>Models of delivery will be consistent.</td>
<td>What</td>
<td>0.0% (0)</td>
<td>16.7% (2)</td>
<td>33.3% (4)</td>
<td>41.7% (5)</td>
<td>8.3% (1)</td>
<td>0.0% (0)</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>Who</td>
<td>8.3% (1)</td>
<td></td>
<td></td>
<td>0.0% (0)</td>
<td>50.0% (6)</td>
<td>33.3% (4)</td>
<td>8.3% (1)</td>
</tr>
<tr>
<td>NGOs</td>
<td>Who</td>
<td>8.3% (1)</td>
<td></td>
<td></td>
<td>0.0% (0)</td>
<td>66.7% (8)</td>
<td>25.0% (3)</td>
<td>0.0% (0)</td>
</tr>
<tr>
<td>International recognition</td>
<td>Value</td>
<td>0.0% (0)</td>
<td></td>
<td></td>
<td>8.3% (1)</td>
<td>50.0% (6)</td>
<td>33.3% (4)</td>
<td>8.3% (1)</td>
</tr>
<tr>
<td>Nimble</td>
<td>Value</td>
<td>8.3% (1)</td>
<td></td>
<td></td>
<td>0.0% (0)</td>
<td>8.3% (1)</td>
<td>25.0% (3)</td>
<td>8.3% (1)</td>
</tr>
<tr>
<td>Service</td>
<td>Value</td>
<td>8.3% (1)</td>
<td></td>
<td></td>
<td>0.0% (0)</td>
<td>8.3% (1)</td>
<td>25.0% (3)</td>
<td>25.0% (3)</td>
</tr>
</tbody>
</table>

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree.
The number of vision stem statements was finalized in Round 3. There were 19 “what” statements, 9 “who” statements, and 26 values that achieved consensus. Statements dropped from Round 3 were: (a) university-based community education and outreach organization, (b) be integrated with teaching and research, (c) seniors, and (d) funders (see Table 3).

Table 3: Percentage Response and Frequencies of Eliminated Round 3 Stem Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>Category</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>University-based community education and outreach organization</td>
<td>What</td>
<td>0.0% 0.0% 0.0% 44.4% 33.3% 22.2%</td>
</tr>
<tr>
<td>Be integrated with teaching and research</td>
<td>What</td>
<td>0.0% 0.0% 11.1% 44.4% 33.3% 11.1%</td>
</tr>
<tr>
<td>Seniors</td>
<td>Who</td>
<td>0.0% 0.0% 11.1% 33.3% 33.3% 22.2%</td>
</tr>
<tr>
<td>Funders</td>
<td>Who</td>
<td>0.0% 0.0% 22.2% 33.3% 33.3% 11.1%</td>
</tr>
</tbody>
</table>

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree.

In Round 4, participants rank-ordered the vision statements with which they “agreed” or “strongly agreed” (see Table 4).

Table 4: Rank-Order of Vision Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>Option 1: Through the use of partnerships and interdisciplinary teams, Cooperative Extension will provide practical solutions for complex issues facing citizens, leaders, and communities.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The underlying principles of leadership, collaboration, teamwork, innovation, and excellence will guide this work.</td>
<td>16.7%</td>
<td>33.3%</td>
<td>33.3%</td>
<td>0.0%</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>(4)</td>
<td>(4)</td>
<td>(0)</td>
<td>(2)</td>
<td></td>
</tr>
</tbody>
</table>
The panelists selected the following definition for the vision of Cooperative Extension for 2015:

Cooperative Extension will use cutting-edge technology along with practical demonstration strategies to connect the power of the Land-Grant University with community needs to improve the quality of life for all citizens. Extension will be guided by valuing collaboration, effectiveness, excellence, healthy (economies, environment, people), inclusiveness, leadership, research, partnerships, and support for employees.
CONCLUSIONS, IMPLICATIONS, & RECOMMENDATIONS

U.S. state and national extension systems should be informed by the vision statement for Cooperative Extension in 2015. The insight from a broad spectrum of extension professionals gives the vision statement credibility and substance. Key components of the vision statement include: cutting edge technology; power of the land-grant university; and values of collaboration, effectiveness, excellence, healthy (economies, environment, people), inclusiveness, leadership, research, partnerships, and support for employees.

The expert panel identified a broad-reaching vision of Cooperative Extension for 2015. The selected vision statement reflected the core stem items identified and prioritized by the panel members through the Delphi process. The statement was grounded in the foundational philosophy of extending the Land-Grant university to all citizens. It takes into account the long-standing belief in providing practical education; however this needs to be completed through the use of cutting-edge technology. The end goal of Cooperative Extension education is to improve the quality of life of the people served.

Eleven guiding values were incorporated into the vision statement. A highly effective Cooperative Extension system should be focused on these identified values. The guiding values relate to how an Extension organization needs to position itself as an inclusive partner, collaborator, and leader among its constituents. There needs to be an overarching emphasis on effectiveness, excellence, research-based education, and support for its employees. Moreover, the end goal of extension education needs to concentrate on healthy people, economies, and environments.

The recommendations from this study are best viewed through the lens of Cornish (2004) who made it clear that to be successful in the future, organizations must plan now, not later. It is recommended U.S extension systems review the vision statement for 2015 and examine how their efforts align with the key components.

References


